

REMARKS

Claims 1-10 are pending in this application. Reconsideration of the rejections in view of these amendments and the following remarks is respectfully requested.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "Version with Markings to Show Changes Made."

Rejections under 35 USC §103(a)

Claims 1 and 4 were rejected under 35 U.S.C. §103(a) as being obvious over Prior Art (Figs. 1 and 2) in view of Kliman (U.S. Patent No. 4,916,346).

Claims 2 and 3 were rejected under 35 U.S.C. §103(a) as being obvious over Prior Art in view of Kliman, and further in view of Trago et al (U.S. Patent No. 6,020,661).

Claim 5 was rejected under 35 U.S.C. §103(a) as being obvious over Prior Art in view of Kliman, and further in view of Naito et al (U.S. Patent No. 5,929,541).

Claim 1 has been amended to recite "said motor comprises a rotor having a plurality of **magnetic salient poles of a first material** highly resistant to corrosion and **a stator being covered by a second material** highly resistant to corrosion."

Kliman discloses a composite rotor lamination for use in reluctance, homopolar or interior permanent magnet rotors. Kliman, however, discusses nothing about a gas transfer machine. Also, Kliman fails to disclose a combination of a salient-pole rotor of a material highly resistant to corrosion such as permalloy and a stator being covered by another material highly resistant to corrosion such as a molded body of synthetic resin.

Trago et al discloses an injection molded motor assembly. Trago et al, however, does not teach or suggest a use for a gas transfer machine.

The Office Action alleged that it would have been obvious "to utilize the shield member of prior art and replace the mold resin as taught by Trago et al for preventing corrosion and improving the corrosion resistance of the stator. Nothing in Trago et al, however, teaches or suggests preventing corrosion and improving the corrosion resistance of the stator. The allegation of the Office Action appears to be based on impermissible hindsight analysis.

As already noted in the previous response, the Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. The present Office Action again has not established a *prima facie* case of obviousness.

First, there is no suggestion or motivation either in the Prior Art, Kliman or Trago et al to modify the references or to combine reference teachings. There is no suggestion or motivation in the knowledge generally available to one of ordinary skill in the art, to modify or combine them. The molding in Trago et al has nothing to do with the use in a gas transfer machine of the present invention.

Second, there cannot be a reasonable expectation of success in combining the Prior Art, Kliman or Trago et al. Nothing in Kliman or Trago et al teaches or suggests solutions to strength problem in a gas transfer machine.

Thus, there is no teaching or suggestion to make the claimed combination and the reasonable expectation of success in the cited references, and the allegation in the Office Action is purely based on Applicants' disclosure. The importance of suggestion is emphasized in Federal Circuit ruling.

See *In re Rouffet*, 47 USPQ2d 1453 (Fed. Cir. 1998) (ruling that the suggestion to combine requirement stands as a critical safeguard against hindsight analysis and rote application of the legal test for obviousness).

Therefore, amended claim 1 patentably distinguishes over the cited references.

Naito et al was cited for disclosing permalloy material for making a rotor. Naito et al does not remedy the deficiencies of Prior Art, Kliman or Trago et al.

Therefore, claims 4 and 5, depending from claim 1, also patentably distinguish over the cited references.

It is submitted that nothing in the cited references, taken either alone or in combination, teaches or suggests all the features recited in each claim of the present invention. Thus all pending claims are in condition for allowance. Reconsideration of the rejections, withdrawal of the rejections and an early issue of a Notice of Allowance are earnestly solicited.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

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In the event that this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. The fees for such an extension or any other fees which may be due with respect to this paper, may be charged to Deposit Account No. 01-2340.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Claims 6-10 have been added.

Claims 1-5 have been amended as follows:

1 1. (Amended) A gas transfer machine for transferring a gas including a corrosive gas,
2 comprising:

3 a pump rotor mounted on a rotatable shaft for transferring a gas; and

4 a reluctance-type motor for rotating said rotatable shaft about its own axis, ~~said reluctance-~~
5 ~~type motor comprising a stator, a motor rotor surrounded by said stator, and a shield member~~
6 ~~isolating said stator from said motor rotor, said motor rotor being directly coupled to said rotatable~~
7 ~~shaft and having a plurality of magnetic salient poles~~ directly coupled thereto, said pump rotor and
8 said motor being disposed in a housing;

9 wherein said motor comprises a rotor having a plurality of magnetic salient poles of a first
10 material highly resistant to corrosion and a stator being covered by a second material highly resistant
11 to corrosion.

2. (Amended) A gas transfer machine according to claim 1, wherein said ~~shield member~~
second material comprises a molded body of synthetic resin having a surface positioned radially

inwardly of an inner circumferential surface of said stator, said stator being embedded in said molded body of synthetic resin.

3. (Amended) A gas transfer machine according to claim 1, wherein said ~~shield member~~ second material comprises a can of synthetic resin or nonconductive material.

4. (Amended) A gas transfer machine according to claim 1, wherein said ~~motor rotor has a~~ first material ~~plurality of permanent magnets disposed respectively in said magnetic salient poles~~ highly resistant to corrosion comprises a magnetic alloy of iron and nickel.

5. (Amended) A gas transfer machine according to claim 1, wherein said ~~motor rotor is made~~ of first material highly resistant to corrosion comprises permalloy.